

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An apparatus for optically correlating signals, comprising:
 - an input light source, the input light source adapted to generate at least one individual light beam from at least one direction;
 - a first plurality of optical elements configured to split the at least one individual light beam into a plurality of component light beams, the plurality of optical elements further configured to direct the plurality of component light beams along a plurality of paths;
 - a plurality of white cells, each white cell configured to receive at least one component light beam, each white cell further configured to propagate light at a specific duration;
 - a micromirror array configured to receive the plurality of component light beams from the plurality of white cells, the micromirror array further configured to reflect the plurality of component light beams among the plurality of white cells;
 - a second plurality of optical elements configured to receive each of the component light beams and combine the plurality of component light beams to form an output light beam.
2. (Original) The apparatus of claim 1, wherein each component light beam of an individual light beam has equal power.
3. (Original) The apparatus of claim 1, wherein the first plurality of optical elements is a plurality of lenses.
4. (Original) The apparatus of claim 1, wherein the plurality of white cells includes a null cell.
5. (Original) The apparatus of claim 1, wherein the micromirror array is a micro-electro-mechanical device.

6. (Original) The apparatus of claim 1, wherein the micromirror array is an array of mirrors, each mirror disposed at a fixed angle.
7. (Original) The apparatus of claim 1, wherein the second plurality of optical elements includes a second plurality of white cells.
8. (New) An apparatus for optically correlating signals, comprising:
 - a input light source, the input light source adapted to generate an input light beam;
 - a first plurality of optical elements configured to split the input light beam into a plurality of component light beams, each of the component light beams being a replica of the input light beam and each of the component light beams having a power less than the input light beam, further the plurality of optical elements further configured to direct each of the plurality of component light beams along a distinct path;
 - a plurality of white cells, each white cell configured to receive at least one component light beam, each white cell further configured to propagate light at a unique duration;
 - a micromirror array configured to receive the plurality of component light beams from the plurality of white cells, the micromirror array further configured to reflect the plurality of component light beams among the plurality of white cells; and
 - a second plurality of optical elements configured to receive each of the component light beams and combine the plurality of component light beams to form an output light beam.
9. (New) The apparatus of claim 8, wherein each component light beam of an individual light beam has equal power.
10. (New) The apparatus of claim 8, wherein the plurality of white cells includes a null cell.
11. (New) The apparatus of claim 8, wherein the micromirror array is a micro-electro-mechanical device.
12. (New) The apparatus of claim 8, wherein the micromirror array is an array of mirrors, each mirror disposed at a fixed angle.

13. (New) The apparatus of claim 8, wherein the second plurality of optical elements includes a second plurality of white cells.